

REMARKS

Claims 9-10, 17, 20, 24-25, 32, 37, 41, 54-56, and 58 were previously canceled without prejudice. Claims 1-8, 11-16, 18-19, 21-23, 26-31, 33-36, 38-40, 42-53, 57, and 59-60 are currently pending.

Applicants respectfully request reconsideration of pending claims based on the following remarks.

Rejections Under 35 U.S.C. § 103

Claims 1, 4-8, 18-19, 21-23, 34-36, 42-43, 46-49, 52-53, 57, and 60 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kaminski* et al. (U.S. Patent No. 6,574,459) in view of *Rogers* (U.S. Patent No. 4,404,685) and *Whikehart* et al. (U.S. Patent No. 7,200,377). Applicants respectfully traverse.

The Examiner admits that *Kaminski* does not teach the limitations “by utilizing a plurality of aviation specific modulation formats and which correspond to a plurality of aviation-specific radio channels and aviation-specific functions” and “substantially simultaneously generate from said digital signal a plurality of aviation-specific output signals corresponding to a plurality of channels within said frequency band” as recited in claim 1 (and other independent claims).

Rogers was cited for disclosing NAV/COM aircraft band signals, and allocation of channels. The Examiner stated that it is understood that the NAV/COM signals have specific modulation formats. The Examiner asserted that it would have been obvious to a person of ordinary skill in the art to modify the system of *Kaminski* based on the teachings of *Rogers* so that the system of *Kaminski* “processes aviation type signals (NAV/COM) that are used by commercial aircrafts using a single A/D converter.” (Office Action, p. 5).

Whikehart was cited for disclosing simultaneous output signals out of digital signal processor 20 (Fig. 1). The Examiner asserted that it would have been obvious to a person of ordinary skill in the art to modify the system of *Kaminski* based on the

teachings of *Whikehart* so multiple users or multiple devices receive a plurality of output signals corresponding to a plurality of channels within the frequency band. (Office Action, pp. 5-6).

Applicants respectfully disagree with the Examiner. In particular, Applicants submit that it would not have been obvious to a person of ordinary skill in the art to modify the system of *Kaminski* based on the teachings of *Rogers* so that the system of *Kaminski* processes aviation type signals that are used by commercial aircraft.

Kaminski discloses a multiple branch receiver system, including a channel branch arranger that receives analog RF signals from an antenna and provides the RF analog signals to a plurality of channel branches. A frequency conversion arrangement comprising at least one frequency converter on at least a respective one of the channel branches adjusts the frequency band of the analog RF signals on the respective channel branch independent of the relative positions of the corresponding analog signals in the RF spectrum of the different channel branches. As the Examiner admits, *Kaminski* does not teach “utilizing a plurality of aviation-specific modulation formats” as recited in claim 1 (and other independent claims). Likewise, *Whikehart* also does not teach this limitation.

Rogers discloses a frequency control system that can be employed in multichannel radio transceivers. The transceiver generally includes a transmitter module and a receiver module, which can be of conventional construction. The transceiver is particularly applicable for handling NAV/COM aircraft band signals. There is no teaching in *Rogers* of any specific structure of the receiver module.

Applicants submit that the Examiner has not articulated sufficient reasons as to why one of ordinary skill in the art would have been motivated to combine the teachings of *Rogers* related to aircraft band signals with the system of *Kaminski*. The Examiner only gives the conclusory statement that it would have been obvious to modify the system of *Kaminski* based on the teachings of *Rogers* so that the system of *Kaminski*

“processes aviation type signals (NAV/COM) that are used by commercial aircrafts using a single A/D converter.”

The Examiner appears to be using Applicants’ disclosure in a hindsight reconstruction of the claimed invention by finding claim elements from disparate prior art references and combining them to arrive at the claimed invention. As the Examiner is aware, such a hindsight reconstruction of the claimed invention is impermissible. Hence, it would not have been obvious to combine the teachings of *Kaminski* and *Rogers* as proposed by the Examiner.

As a result, independent claims 1, 18, 34, 43, 46, 53, and 57 would not have been obvious over the cited references.

Since claims 4-8 and 60 depend from claim 1, these dependent claims include the limitations of claim 1. Since claims 19 and 21-23 depend from claim 18, these dependent claims include the limitations of claim 18. Since claims 35, 36, and 42 depend from claim 34, these dependent claims include the limitations of claim 34. Since claims 47-49 and 52 depend from claim 46, these dependent claims include the limitations of claim 46.

As a result, the foregoing dependent claims would also not have been obvious over the cited references for at least the reasons discussed above.

Applicants therefore respectfully request that the rejection of claims 1, 4-8, 18-19, 21-23, 34-36, 42-43, 46-49, 52-53, 57, and 60 under 35 U.S.C. § 103(a) be withdrawn.

Claims 2-3, 14-15, 27, 44-45, and 50-51 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kaminski* in view of *Rogers* and *Whikehart*, and further in view of *Phillips et al.* (U.S. Patent No. 5,859,878). Applicants respectfully traverse.

Claims 2-3 and 14-15 depend from claim 1, and thus include the limitations of claim 1. Claim 27 depends from independent claim 18 and thus includes the limitations of claim 18. Claims 44-45 depend from independent claim 43 and thus include the

limitations of claim 43. Claims 50-51 depend from independent claim 46 and thus include the limitations of claim 46.

As a result, these foregoing dependent claims would not have been obvious over the cited references for at least the reasons discussed with respect to their respective base independent claims.

Applicants thus respectfully request that the rejection of claims 2-3, 14-15, 27, 44-45, and 50-51 under 35 U.S.C. § 103(a) be withdrawn.

Claims 11-13 and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kaminski* in view of *Rogers* and *Whikehart*, and further in view of *Bugeja et al.* (U.S. Publication No. 2002/0177446). Applicants respectfully traverse.

Claims 11-13 depend from claim 1 and thus include the limitations of claim 1. Claim 26 depends from independent claim 18 and thus includes the limitations of claim 18. As a result, these foregoing dependent claims would not have been obvious over the cited references for at least the reasons discussed above with respect to their respective base independent claims.

Applicants therefore respectfully request that the rejection of claims 11-13 and 26 under 35 U.S.C. § 103(a) be withdrawn.

Claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kaminski* in view of *Rogers*, *Whikehart*, *Phillips*, and further in view of *Bugeja*. Applicants respectfully traverse.

Claim 16 depends from claim 1 and thus includes the limitations of claim 1. Hence, claim 16 would not have been obvious over these cited references for at least the reasons stated above with respect to claim 1.

Applicants therefore respectfully request that the rejection of claim 16 under 35 U.S.C. § 103(a) be withdrawn.

Claims 38-40 and 59 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kaminski* in view of *Rogers*, *Whikehart*, *Bugeja*, and further in view of *Phillips*. Applicants respectfully traverse.

Claims 38-40 depend from independent claim 34, and thus include the limitations of claim 34. Claim 59 depends from independent claim 57 and thus includes the limitations of claim 57. As a result, these foregoing dependent claims would not have been obvious over the cited references for at least the reasons discussed above with respect to their respective base independent claims.

Applicants therefore respectfully request that the rejection of claims 38-40 and 59 under 35 U.S.C. § 103(a) be withdrawn.

Claims 18-19, 21-23, 27-31, and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kelley* (U.S. Patent No. 5,870,402) in view of *Rogers* and *Kelley* et al. (U.S. Patent No. 5,280,636). Applicants respectfully traverse.

The Examiner admits that *Kelley* '402 does not teach the limitations "by utilizing a plurality of aviation-specific modulation formats and which correspond to a plurality of aviation-specific radio channels and aviation-specific functions" as recited in independent claims 18 and 29. *Rogers* was cited for disclosing NAV/COM aircraft band signals, and allocation of channels. The Examiner asserted that it would have been obvious to a person of ordinary skill in the art to modify the system of *Kelley* '402 based on the teachings of *Rogers* so that the system of *Kelley* '402 "processes aviation type signals (NAV/COM) that are used by commercial aircrafts." (Office Action, p. 18).

Applicants submit that the Examiner has not articulated sufficient reasons as to why one of ordinary skill in the art would have been motivated to combine the teachings of *Rogers* related to aircraft band signals with the system of *Kelley* '402. The Examiner only gives the conclusory statement that it would have been obvious to modify the system of *Kelley* '402 based on the teachings of *Rogers* so that the system of *Kelley* '402 "processes aviation type signals (NAV/COM) that are used by commercial aircrafts."

The Examiner appears to be using Applicants' disclosure in a hindsight reconstruction of the claimed invention by finding claim elements from disparate prior art references and combining them to arrive at the claimed invention. As the Examiner is aware, such a hindsight reconstruction of the claimed invention is impermissible. Hence, it would not have been obvious to combine the teachings of *Kelley* '402 and *Rogers* as proposed by the Examiner.

As a result, independent claims 18 and 29 would not have been obvious over the cited references.

Since claims 19, 21-23, and 27-28 depend from claim 18, these dependent claims include the limitations of claim 18. Since claims 30-31 and 33 depend from claim 29, these dependent claims include the limitations of claim 29. As a result, the foregoing dependent claims would also not have been obvious over the cited references for at least the reasons discussed with respect to claims 18 and 29.

Applicants therefore respectfully request that the rejection of claims 18-19, 21-23, 27-31, and 33 under 35 U.S.C. § 103(a) be withdrawn.

Claim 27 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kelley* '402 in view of *Rogers*, *Kelley* '636, and further in view of *Phillips*. Applicants respectfully traverse.

Since claim 27 depends from independent claim 18, claim 27 includes the limitations of claim 18. As a result, claim 27 would not have been obvious over the cited references for at least the reasons discussed previously with respect to claim 18.

Applicants therefore respectfully request that the rejection of claim 27 under 35 U.S.C. § 103(a) be withdrawn.

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Serial No.: 10/616,796

Filing Date: 7/10/2003

Attorney Docket No. H0004400

Title: RADIO RECEIVER

CONCLUSION

Applicants respectfully submit that the pending claims are in condition for allowance and notification to that effect is earnestly requested. If necessary, please charge any additional fees or credit overpayments to Deposit Account No. 502432.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at the telephone number listed below.

Respectfully submitted,

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/GREGORY M. TAYLOR/

Gregory M. Taylor
Reg. No. 34,263Attorneys for Applicants
Fogg & Powers LLC
5810 W. 78th Street, Ste. 100
Minneapolis, MN 55439
T – (952) 465-0770
F – (952) 465-0771